

V. REMARKS

Entry of the Amendment is proper under 37 C.F.R. §1.116 because the Amendment: a) places the application in condition for allowance for the reasons discussed herein; b) does not raise any new issue requiring further search and/or consideration because the Amendment amplifies issues previously discussed throughout prosecution; c) does not present any additional claims without canceling a corresponding number of finally rejected claims; and d) places the application in better form for appeal, should an Appeal be necessary. The Amendment is necessary and was not earlier presented because it is made in response to arguments raised in the final rejection. The amendments to the subject claims do not incorporate any new subject matter into the claims. Thus, entry of the Amendment is respectfully requested.

Claims 4 and 8 are objected to 37 CFR 1.75. The United States Patent and Trademark Office asserts that these claims are a substantial duplicate of claims 3 and 7 respectively. Claims 3 and 7 are canceled. Withdrawal of the objection is respectfully requested.

Claim 7 is rejected under 35 U.S.C. 112, second paragraph. Claim 7 is canceled. Thus, the rejection as applied to claim 7 is now moot. Withdrawal of the rejection is respectfully requested.

Claims 1, 3-5, 7 and 8 are rejected under 35 U.S.C. 103(a) as unpatentable over Irie (U.S. Patent No. 4,468,267) in view of Yokohama (Japan 59-93345), Brown et al. (U.S. Patent No. 5,554,242), Laurent (U.S. Patent No. 4,963,207), Okada et al. (EP 958,913) and Krupp (EP 624,456) and, optionally, Pirelli (EP 875364) and further in view of Nakahama (U.S. Patent No. 4,369,086) and Brey et al. (U.S. Patent No. 3,849,231). The rejection is respectfully traversed.

Irie teaches an apparatus and method for manufacturing a radial tire. A carcass ply is formed into a cylindrical shape having an external diameter almost equal to an internal diameter of a pair of beaded cores. The cylindrical carcass is subsequently transformed to assume a circumferentially wave-shaped corrugated carcass ply over an entire length thereof in an axial direction while containing an outer diameter of the carcass ply. The pair of beaded cores are arranged in selected positions on the wave-shaped corrugated carcass ply which has been contracted in

diameter. The carcass ply is then normalized into its cylindrical shape so as to form a structure having a pair of bead cores in contact with the external surface of the carcass ply. The carcass ply is expanded in diameter in an area thereof between the pair of bead cores of the structure. End portions of the carcass ply disposed axially outside the bead cores are bent so as to enclose the bead cores therein within portions of the carcass ply. A cylindrical carcass layer is then assembled by incorporating sidewall members with the structure. The cylindrical carcass layer is transformed to a torroidal shape thereby forming a green tire.

Yokohama, which is also owned by The Yokohama Rubber Co. Ltd., teaches a method and apparatus for supplying tire component material. The Examiner cites this reference to show an industry trend to eliminate the need for stocking of materials for tires. Please be advised that we only have an English-language abstract of this reference.

Brown teaches a method for making a multi-component tire. A band that constitutes a tire carcass is formed by adding gum strips to an inner liner which is covered with a ply to form the band which is then transferred to a first tire building position for the addition of a sidewall, shoulder wedge and beads. From this position, these components are transferred to a second tire building position for final shaping of an uncured tire and the addition of breakers and tread rubber. The sidewall and shoulder wedge are formed by applying a plurality of turns of elastomer strip to obtain their shape on the carcass at the first tire building position.

Laurent teaches a method and apparatus of manufacturing a tire by laying rubber products onto a firm support. The Examiner points out in column 2, lines 15-24, that the object of this invention is to provide a method and apparatus of manufacturing tires which does away with the necessity of preparing numerous semi-finished products, as is required in conventional methods of manufacture.

Okada teaches an apparatus and method for aligning and splicing strip members for the manufacturer of pneumatic radial tires. The Examiner applies this reference to show a belt supply process/means that are formed by rubberizing strips which are spliced to form a belt.

Krupp discloses a device for picking up, transporting and accurately locating a bead wire on a tire building machine. The device allows different sizes of bead wires

without the cost of additional parts for each size and enables size change to be rapidly made.

Pirelli teaches a method and apparatus for producing a plurality of different tires having different features and being distributed in at least two separate series. The plurality of different tires are produced in an intermittent mode in arrangements of successive lots where the production of one lot belonging to one predetermined series alternates with the production of another lot of tires belonging to a different series.

Nakahama discloses a bead supply apparatus. Brey teaches a bead mechanism. Mukae teaches an apparatus for transferring annular articles such as pneumatic tires from one station to another station. The Examiner applies these references to show additional detail of conventional devices and processes used to supply beads and transferring tires. The Examiner states that such references show the well-known use of storage means for a plurality of beads in a vicinity of a building, i.e. assembly, line.

In rejecting claims under 35 U.S.C. §103, the United States Patent and Trademark Office bears the initial burden of presenting a *prima facie* case of obviousness. Only if that burden is met, does the burden of coming forward with evidence or argument shift to the applicant. "A *prima facie* case of obviousness is established if the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art." The mere fact that the prior art *may* be modified in the manner suggested by the Examiner neither makes the modification *prima facie* obvious or obvious unless the prior art suggested the desirability of the modification. The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art. The conclusion that the claimed subject matter is obvious must be supported by evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led the individual to combine the relevant teachings of the references to arrive at the claimed invention. If the Examiner fails to establish a *prima facie* case of obviousness, the rejection is improper and will be overturned.

It is respectfully submitted that there must be a basis in the art for combining or modifying references. Obviousness cannot be established by combining the

teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination. The Office Action provides no reasonable justification for one of ordinary skill in the art to combine the features of Irie, Yokohama, Brown, Laurent, Okada and Krupp and, optionally, Pirelli, Nakahama and Brey. It is highly improbable that one of ordinary skill in the art would combine the teachings of six (6) to nine (9) references to arrive at the claimed invention.

It is respectfully submitted that where no reasonable intrinsic or extrinsic justification exists for the proposed combination, *prima facie* obviousness will not have been established.

It is respectfully submitted that the motivation presented by the United States Patent and Trademark Office is derived from the claimed invention, not the applied art. Based upon the benefits of the claimed invention, the United States Patent and Trademark Office improperly establishes motivation because it is found in the claimed invention and not in the applied art. The United States Patent and Trademark Office must show motivation to combine the applied art in view of the applied art themselves, not by showing the benefits of the claimed invention itself.

MPEP 2143.01 states that the prior art must suggest the desirability of the claimed invention. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art.

It is respectfully submitted that the United States Patent and Trademark Office fails to identify a persuasive suggestion to combine the teachings of the references. "Identification in the prior art of each individual part claimed is insufficient to defeat patentability to the whole claimed invention." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1316 (Fed. Cir. 2000) (citing In re Rouffet, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457 (Fed. Cir. 1998)). "Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant." Id., 55 USPQ2d at 1316 (citing In re Dance, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998) and In re Gordon, 733 F.2d 900, 902, 221 USQP 1125, 1127 (Fed. Cir. 1984)). "Evidence of a suggestion, teaching, or motivation to combine may flow from the prior art references

themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved....” In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) (citing Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc., 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1630 (Fed. Cir. 1996) and Para-Ordinance Mfg. v. SGS Imports Intern., Inc., 73 F.3d 1085, 1088, 37 USPQ2d 1237, 1240 (Fed. Cir. 1995)). “The range of sources available, however, does not diminish the requirement for actual evidence. That is, the showing must be clear and particular. See, e.g., C.R. Bard, 157 F.3d at 1352, 48 USPQ2d at 1232. Broad conclusory statements regarding the teaching of multiple references, standing alone, are not ‘evidence.’” Id., 50 USPQ2d 1576 at 1617 (citing McElmurry v. Arkansas Power & Light Co., 995 f.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993) and In re Sichert, 566 F.2d 1154, 1164, 196 USPQ 209, 217 (CCPA 1977)).

Thus, the United States Patent and Trademark Office fails to properly establish any motivation for one of ordinary skill in the art to combine the features of the applied art to arrive at the claimed invention. To the contrary, the motivation asserted by the United States Patent and Trademark Office is actually found in the claimed invention.

According to the present invention, it is possible to instantaneously alter the setting of the tire forming system including inner liner supply means, carcass supply means, band rubber parts supply means, belt/tread member supply means and bead supply means, to cope with an optional particular specification of a tire to be formed. Thus, if it is made to control all the member means of the system by a computer for example, then it even is possible to alter tire specifications, each for a small lot production.

With the tire production equipment in the prior art, while it is possible to produce tires of a plurality of different specifications on a same production line, they are on condition that tires of a same specification are produced continuously in mass, in contrast to the claimed invention that is on condition that tires of a variety of different specifications are produced each in a small quantity. In other words, in the prior art, there does not exist such a technical concept according to which, with use of a large scale tire production equipment, tires of a variety of specifications are produced, each in a limited quantity.

What is constructed by the United States Patent and Trademark Office is merely a fragmentary combination or aggregation of prior art references which are on the premise of a mass production, and the United States Patent and Trademark Office fails to cite a reference showing such a tire production system enabling a small quantity production respectively of a variety of tires different in the specification which is an advantage of the claimed invention.

Furthermore, it is respectfully submitted that the results and advantages are a part of the claimed invention as a whole. It is a basic tenet of patent law that the United States Patent and Trademark Office is not permitted to ignore the results and advantages produced by claimed subject matter, of which the prior art is devoid, simply because the claimed limitations are similar to that otherwise barren prior art.

The motivation presented by the United States Patent and Trademark Office is derived from the claimed invention, not the applied art. Based upon the benefits of the claimed invention, the United States Patent and Trademark Office improperly establishes motivation because it is found in the claimed invention and not in the applied art. The United States Patent and Trademark Office must show motivation to combine the applied art in view of the applied art themselves, not by showing the benefits of the claimed invention itself.

Furthermore, it is respectfully submitted that the United States Patent and Trademark Office may not, because of doubt that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in the factual basis for the rejection.

Withdrawal of the rejection is respectfully requested.

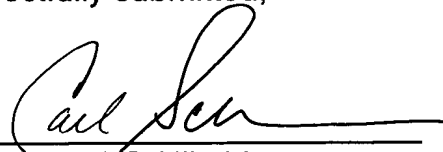
In view of the foregoing, reconsideration of the application and allowance of the pending claims are respectfully requested. Should the Examiner believe anything further is desirable in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' representative at the telephone number listed below.

Should additional fees be necessary in connection with the filing of this paper or if a Petition for Extension of Time is required for timely acceptance of the same, the Commissioner is hereby authorized to charge Deposit Account No. 18-0013 for any such fees and Applicant(s) hereby petition for such extension of time.

Respectfully submitted,

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